



SEQUENCE LISTING

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The Government of the United States of America
as represented by the Secretary of the
Department of Health and Human Services

<120> T-Cell Receptor Gamma Alternate Reading Frame Protein,
(TARP) and Uses Thereof

<130> 4239-61854-01

<140> 10/031,158
<141> 2002-01-11

<150> PCT/US00/19039
<151> 2000-07-12

<150> US 60/157,471
<151> 1999-10-01

<150> US 60/143,560
<151> 1999-07-13

<160> 33

<170> PatentIn Ver. 2.1

<210> 1
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 1
aacttggaag ggrgaacraa gtcagtc 27

<210> 2
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 2
agtactaaaa cgctgtcaaa aacagcc 27

<210> 3

<211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 3
 ttggacttgg attatcaaaa gtgg 24

 <210> 4
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 4
 ttgggcagtt ggaacaacct gaaa 24

 <210> 5
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 5
 gataaacaac ttgatgcaga tgtttccc 28

 <210> 6
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 6
 gggaaacatc tgcataagtt tgtttatc 28

 <210> 7
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 7
 ctggagcttt gtttcagcaa ttgaagg 27

<210> 8
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 8
ctcaagaaga caaaggatg ttccagc

27

<210> 9
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 9
ttatgatttc tctccattgc agcag

25

<210> 10
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 10
gaagttacta tgagcttagt ccctt

25

<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 11
aagctttgtt ccgggaccaa atac

24

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 12
tacctgtgac aacaagtgtt gttc

24

<210> 13
<211> 1027
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (74)..(247)
<223> Coding region for PS-TCR gamma 1 polypeptide
(TARP)

<220>
<221> CDS
<222> (247)..(579)
<223> Coding region for PS-TCR gamma 2 polypeptide (deduced amino
acid sequence not displayed along with DNA sequence, due to
overlapping CDS's)

<400> 13
gggcaagagt tgggcaaaaa aatcaaggta tttggtcccg gaacaaagct tatkattaca 60
gataaacaac ttg atg cag atg ttt ccc cca agc cca cta ttt ttc ttc 109
Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe Phe
1 5 10
ctt caa ttg ctg aaa caa agc tcc aga agg ctg gaa cat acc ttt gtc 157
Leu Gln Leu Leu Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val
15 20 25
ttc ttg aga aat ttt tcc ctg atg tta tta aga tac att ggc aag aaa 205
Phe Leu Arg Asn Phe Ser Leu Met Leu Leu Arg Tyr Ile Gly Lys Lys
30 35 40
aga aga gca aca cga ttc tgg gat ccc agg agg gga aca cca 247
Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro
45 50 55
tgaagactaa cgacacatac atgaaattta gctgggttaac ggtgccagaa aagtcactgg 307
acaaagaaca cagatgtatc gtcagacatg agaataataa aaacggagtt gatcaagaaa 367
ttatctttcc tccaataaag acggatgtca tcacaatgga tcccaaagac aattgttcaa 427
aagatgcaaa tgatacacta ctgctgcagc tcacaaacac ctctgcatat tacatgtacc 487
tcctctctgct cctcaagagt gtggtctatt ttgccatcat cacctgctgt ctgcttagaa 547
gaacggcttt ctgctgcaat ggagagaaat cataacagac ggtggcacia ggaggccatc 607
ttttctcat cggttattgt ccctagaagc gtcttctgag gatctagttg ggctttcttt 667

ctggggttgg gccatttcag ttctcatgtg tgtactattc tatcattatt gtataacggg 727
 tttaaacca gtgggcacac agagaacctc actctgtaat aacaatgagg aatagccacg 787
 gcgatctcca gcaccaatct ctccatgttt tccacagctc ctccagccaa cccaaatagc 847
 gcctgctata gtgtagacat cctgcgggctt ctagccttgt ccctctctta gtgttcttta 907
 atcagataac tgcttgaag cctttcattt tacacgcctt gaagcagtct tctttgctag 967
 ttgaattatg tgggtgtgtt ttccgtaata agcaaaataa atttaaaaaa atgaaaagtt 1027

<210> 14
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 14
 Met Gln Met Phe Pro Pro Ser Pro Leu Phe Phe Phe Leu Gln Leu Leu
 1 5 10 15
 Lys Gln Ser Ser Arg Arg Leu Glu His Thr Phe Val Phe Leu Arg Asn
 20 25 30
 Phe Ser Leu Met Leu Leu Arg Tyr Ile Gly Lys Lys Arg Arg Ala Thr
 35 40 45
 Arg Phe Trp Asp Pro Arg Arg Gly Thr Pro
 50 55

<210> 15
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 15
 Met Lys Thr Asn Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro
 1 5 10 15
 Glu Lys Ser Leu Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn
 20 25 30
 Asn Lys Asn Gly Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr
 35 40 45
 Asp Val Ile Thr Met Asp Pro Lys Asp Asn Cys Ser Lys Asp Ala Asn
 50 55 60
 Asp Thr Leu Leu Leu Gln Leu Thr Asn Thr Ser Ala Tyr Tyr Met Tyr
 65 70 75 80
 Leu Leu Leu Leu Leu Lys Ser Val Val Tyr Phe Ala Ile Ile Thr Cys
 85 90 95
 Cys Leu Leu Arg Arg Thr Ala Phe Cys Cys Asn Gly Glu Lys Ser

100

105

110

<210> 16
 <211> 16
 <212> PRT
 <213> Homo sapiens

<220>
 <223> Partial amino acid sequence of TARP (residues
 42-57)

<400> 16
 Gly Lys Lys Arg Arg Ala Thr Arg Phe Trp Asp Pro Arg Arg Gly Thr
 1 5 10 15

<210> 17
 <211> 16
 <212> PRT
 <213> Dictyostelium discoideum

<220>
 <223> Partial amino acid sequence of Tup1 (dTup,
 residues 521-536)

<400> 17
 Gly Ser Lys Asp Arg Ser Val Gln Phe Trp Asp Pro Arg Asn Gly Thr
 1 5 10 15

<210> 18
 <211> 16
 <212> PRT
 <213> Saccharomyces cerevisiae

<220>
 <223> Partial amino acid sequence of Tup1 (yTup1,
 residues 626-660)

<400> 18
 Gly Ser Lys Asp Arg Gly Val Leu Phe Trp Asp Lys Lys Ser Gly Asn
 1 5 10 15

<210> 19
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:PCR primer

<400> 19
 ttacagataa acaacttgat acagatgttt cccccaagcc c

<210> 20
 <211> 39
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 20
 gggcttgggg gaaacatctg tatcaagttg tttatctgt 39

 <210> 21
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 21
 gataaacaac ttgatgcaga tatttcccc aagccc 36

 <210> 22
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 22
 gggcttgggg gaaatatctg catcaagttg tttatc 36

 <210> 23
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 23
 gataaacaac ttgatacaga tatttcccc aagccc 36

 <210> 24
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:PCR primer

 <400> 24

gggcttgggg gaaatatctg tatcaagttg tttatc 36

<210> 25
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 25
cccaggaggg gaacaccata aagactaacg acacatac 38

<210> 26
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 26
gtatgtgtcg ttagtcttta tgggtgtccc ctctctggg 38

<210> 27
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 27
gataaacaac ttgatgcaga tgttt 25

<210> 28
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:PCR primer

<400> 28
ttatgatttc tctccattgc agcag 25

<210> 29
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 29

aagctttgtt ccgggaccaa atac

24

<210> 30

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 30

atctggcacc acaccttcta caatgagctg cg

32

<210> 31

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 31

cttcatactc ctgcttgctg atccacatct gc

32

<210> 32

<211> 4

<212> PRT

<213> Homo sapiens

<220>

<223> Protein kinase phosphorylation site

<400> 32

Arg Arg Ala Thr

1

<210> 33

<211> 4

<212> PRT

<213> Homo sapiens

<220>

<223> Protein kinase phosphorylation site

<400> 33

Arg Arg Gly Thr

1